

PROJECT DESCRIPTION

THIS PROJECT IS LOCATED AT THE INTERSECTION OF MD 197 (LAUREL-BOWIE ROAD) AT SNOWHILL ESTATES LANE IN PRINCE GEORGE'S COUNTY. THE PROJECT INVOLVES THE INSTALLATION OF LED VEHICULAR TRAFFIC SIGNAL HEADS, A STRAIN POLE WITH LIGHTING ARM AND LUMINAIRE IN THE SOUTHWEST QUADRANT OF THE INTERSECTION, OVERHEAD SIGNS, LED COUNTDOWN PEDESTRIAN SIGNAL HEADS, APS PUSHBUTTONS WITH SIGNS AND ADA COMPLIANT SIDEWALK RAMPS. MD 197 IS ASSUMED TO RUN IN A NORTH-SOUTH DIRECTION.

INTERSECTION OPERATION

THIS INTERSECTION CURRENTLY OPERATES IN A NEMA SIX-PHASE FULL-TRAFFIC-ACTUATED MODE WITH EXCLUSIVE/PERMISSIVE LEFT-TURN PHASES FOR NB AND SB MD 197. AN ALTERNATE PEDESTRIAN PHASE IS PROVIDED FOR THE NORTH LEG OF THE INTERSECTION. THE ALTERNATE PEDESTRIAN PHASE FOR THE SOUTH LEG IS BEING REMOVED.

CONTROLLER REQUIREMENTS

THE EXISTING FULL-TRAFFIC-ACTUATED EIGHT PHASE TRAFFIC SIGNAL CONTROLLER HOUSED IN A BASE MOUNTED CABINET WILL BE USED. AN APS CENTRAL CONTROL UNIT WILL BE FURNISHED BY THE CONTRACTOR AND INSTALLED BY SHA.

SPECIAL NOTE

APS WILL FUNCTION AS FOLLOWS:

FOR MD 197 (LAUREL-BOWIE ROAD):

A. WHEN PEDESTRIAN LOCATES AND PRESSES PUSHBUTTON FOR AN EXTENDED TIME, THE PUSHBUTTON UNIT MESSAGE WILL BE "WAIT TO CROSS LAUREL-BOWIE AT SNOWHILL ESTATES."

B. WHEN WALK PHASE BEGINS, THE MESSAGE WILL BE A RAPID TICK WHICH WILL LAST FOR THE DURATION OF THE WALK PHASE.

CONTACT PERSONS FOR DISTRICT # 3 ARE AS FOLLOWS:

MR. BRIAN YOUNG
ASSISTANT DISTRICT ENGINEER-TRAFFIC
PHONE: (301) 513-7358

MR. AUGIE REBISH
UTILITY ENGINEER
PHONE: (301) 513-7350

MR. VERNON STINNETT, JR.
ASSISTANT DISTRICT ENGINEER-MAINTENANCE
PHONE: (301) 513-7304

CONTACT PERSONS FOR OOTS ARE AS FOLLOWS:

MR. RICHARD L. DAFF, SR.
CHIEF, TRAFFIC OPERATIONS
DIVISION
PHONE: (410) 787-7630

MR. ROBERT SNYDER
ASSISTANT DIVISION CHIEF
TRAFFIC OPERATIONS
410-787-7630

MR. ED RODENHIZER
CHIEF, SIGNAL OPERATIONS
410-787-7650

MR. EUGENE BAILEY
CHIEF, SIGN OPERATIONS
410-787-7676

THE POWER COMPANY IS:

BGE
GAS AND ELECTRIC NEW BUSINESS DEPT.
(410) 787-7650

CONSTRUCTION DETAILS (CONTINUED)

- ADJUST EXISTING HANDHOLE TO FINAL SIDEWALK GRADE.
- INSTALL 3/8" DIAMETER SPAN WIRE WITH 1/4" DIAMETER TETHER.
- SPLICE 2-CONDUCTOR WIRE (ALUMINUM SHIELDED TO EXISTING LOOP WIRE. SPLICING SHALL BE INCIDENTAL TO 2-CONDUCTOR WIRE (ALUMINUM SHIELDED).
- REMOVE EXISTING SIGNAL HEAD AND INSTALL PROPOSED LED SIGNAL HEAD IN EXISTING LOCATION.
- INSTALL LED SIGNAL HEAD ON PROPOSED SPAN WIRE.
- REMOVE EXISTING OVERHEAD SIGN.
- INSTALL GROUND MOUNTED SIGN ON 2-4"x4" WOOD POSTS.
- REMOVE EXISTING PEDESTRIAN SIGNAL HEAD FROM EXISTING STRAIN POLE. PLUG ALL UNUSED HOLES IN EXISTING POLE. INSTALL SIGN ON EXISTING STRAIN POLE.
- INSTALL OVERHEAD SIGN ON PROPOSED SPAN WIRE.
- INSTALL DOWN GUY WIRES TO SUPPORT DOUBLE LOAD. REMOVE WHEN EXISTING SPAN WIRE AND SIGNALS ARE REMOVED
- INSTALL 12 INCH WHITE HEAT APPLIED PREFORMED THERMOPLASTIC PAVEMENT MARKINGS.
- INSTALL ADA COMPLIANT RAMPS WITH DETECTABLE WARNING SURFACES (SEE SIDEWALK PLANS FOR DETAILS).
- INSTALL 24 INCH WHITE HEAT APPLIED PREFORMED THERMOPLASTIC PAVEMENT MARKINGS.

EQUIPMENT LIST "A"

A. EQUIPMENT TO BE SUPPLIED BY THE SHA.

ITEM NO.	DESCRIPTION	UNIT	QUANTITY
9009	12" X 30' STRAIN POLE	EA	1
9570	SHEET ALUMINUM SIGNS - GROUND MOUNTED	SF	10
9571	1-SHIELD ASSEMBLY (30"x48")		
	SHEET ALUMINUM SIGNS - POLE MOUNTED	SF	58
	1-SHIELD ASSEMBLY (30"x48")		
9572	2-SHIELD ASSEMBLIES (48"x72")		
	SHEET ALUMINUM SIGNS - SPAN MOUNTED	SF	19
	1-R3-5R (30"x36")		
	1-D3-2 (DUAL FACED) (96"x16")		

EQUIPMENT LIST "B"

B. EQUIPMENT TO BE FURNISHED AND/OR INSTALLED BY THE CONTRACTOR.

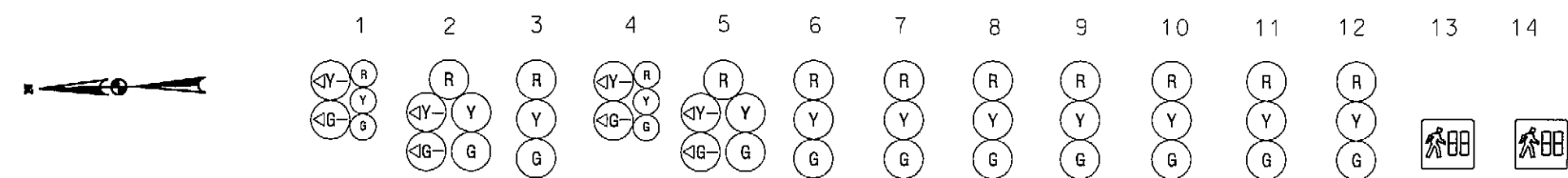
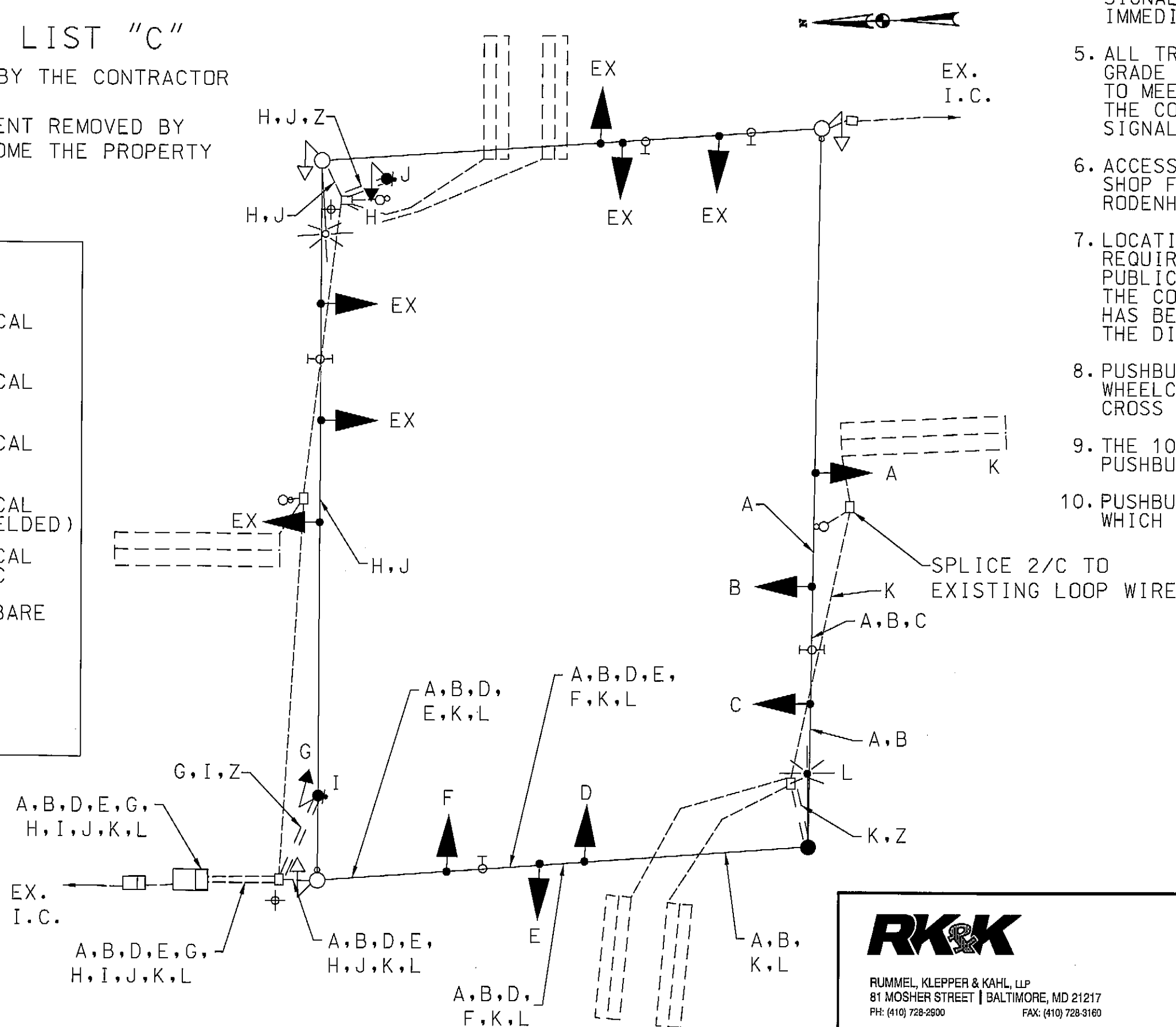
ITEM NO.	DESCRIPTION	UNIT	QUANTITY
1001	MAINTENANCE OF TRAFFIC	EA	2
1002	REMOVAL OF EXISTING PAVEMENT LINE MARKINGS - ANY WIDTH	LF	640
2002	TEST PIT EXCAVATION	CY	3
5002	F & I 12" WHITE LEAD FREE REFLECTIVE THERMOPLASTIC PAVEMENT MARKINGS	LF	360
5003	F & I 24" WHITE LEAD FREE REFLECTIVE THERMOPLASTIC PAVEMENT MARKINGS	LF	80
6001	F & I STANDARD TYPE A COMBINATION CURB AND GUTTER 12" GUTTER PAN 8" DEPTH	LF	180
6002	F & I 5" CONCRETE SIDEWALK	SF	390
8001	F & I 12" (R, Y, G) LED SIGNAL HEAD SECTION	EA	38
8002	F & I 15' LIGHTING ARM ON EXISTING STRUCTURE	EA	1
8003	F & I 2" WIRE CENTRAL CONTROL UNIT	EA	1
8007	F & I 8" LED SIGNAL (R, Y, G) HEAD SECTION	EA	6
8009	ADJUST HANDHOLE TO GRADE	EA	2
8010	F & I AUDIBLE/TACTILE PEDESTRIAN PUSHBUTTON STATION & SIGNS	EA	2
8011	F & I BREAKAWAY PEDESTAL POLE (ANY SIZE)	EA	2
8014	F & I LED 16" COUNTDOWN PEDESTRIAN SIGNAL HEAD	EA	2
8016	REMOVE & DISPOSE OF EQUIPMENT (PER ASSIGNMENT)	EA	1
8018	REMOVE FOUNDATION 12" DEPTH	EA	1
8023	F & I ELECTRICAL CABLE-2 CONDUCTOR (NO 12 AWG) - TRAY CABLE	LF	165
8027	F & I 3" (UP TO 4") SCHEDULE 80 RIGID PVC CONDUIT - TRENCHED	LF	50
8028	F & I DETECTABLE WARNING SURFACES	SF	40
8031	F & I WOOD SIGN SUPPORTS 4" X 4"	LF	32
8033	F & I NO. 6 AWG STRANDED BARE COPPER GROUND WIRE	LF	50
8035	F & I WEATHER HEAD, 3"	EA	1
8045	INSTALL GROUND MOUNTED SIGN	SF	10
8046	INSTALL OVERHEAD SIGN	SF	77
8051	250 WATT HIGH PRESSURE SODIUM LAMP AND LUMINAIRE	EA	1
8054	F & I ELECTRICAL CABLE - 2 CONDUCTOR (ALUMINUM SHIELDED)	LF	250
8055	F & I ELECTRICAL CABLE - 2 CONDUCTOR (NO. 14 AWG)	LF	290
8057	F & I ELECTRICAL CABLE - 5 CONDUCTOR (NO. 14 AWG)	LF	60
8058	F & I ELECTRICAL CABLE - 7 CONDUCTOR (NO. 14 AWG)	LF	625
8061	INSTALL STEEL POLE AND SINGLE MAST ARM, ANY SIZE	EA	1
8063	F & I STEEL SPAN WIRE - 1/4" DIAMETER	LF	245
8064	F & I STEEL SPAN WIRE - 3/8" DIAMETER	LF	245
NEG	F, I, & REMOVE DOWN GUY WIRE	EA	2

EQUIPMENT LIST "C"

C. EQUIPMENT TO BE REMOVED BY THE CONTRACTOR AND RETURNED TO SHA.
ALL MATERIALS AND EQUIPMENT REMOVED BY THE CONTRACTOR SHALL BECOME THE PROPERTY OF THE CONTRACTOR.

WIRING KEY

A,B.	7-CONDUCTOR ELECTRICAL CABLE (NO. 14 AWG)
C,F.	5-CONDUCTOR ELECTRICAL CABLE (NO. 14 AWG)
G,H	5-CONDUCTOR ELECTRICAL CABLE (NO. 14 AWG)
I,J	2-CONDUCTOR ELECTRICAL CABLE (NO. 14 AWG)
K	2-CONDUCTOR ELECTRICAL CABLE (ALUMINUM SHIELDED)
L	2-CONDUCTOR ELECTRICAL CABLE (NO.12 AWG) TC
Z	NO. 6 AWG STRANDED BARE COPPER GROUND WIRE
EX	USE EXISTING SIGNAL CABLE
+	EXISTING GROUND ROD



PHASE 1 & 5	1	2	3	4	5	6	7	8	9	10	11	12	13	14	
CHANGES TO PHASES 1 & 6, 2 & 5, OR 2 & 6															
PHASE 1 & 6															
1 & 6 CHANGE															
PHASE 2 & 5															
2 & 5 CHANGE															
PHASE 2 & 6															
2 & 6 CHANGE															
PHASE 4 & 8															
4 & 8 CHANGE															
PHASE 4 & 8 ALT															
PED. CLEARANCE/COUNTDOWN															
4 & 8 ALT CHANGE															
FLASHING OPERATION															

GENERAL NOTES

- THE CONTRACTOR SHALL VERIFY ALL PROPOSED POLE LOCATIONS PRIOR TO INSTALLATION.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR TERMINATING ALL SIGNAL CABLE TO THE APPROPRIATE TERMINALS AND PROPERLY LABELING EACH CABLE.
- ALL UNUSED CABLE SHALL BE REMOVED AND DISPOSED OF BY THE CONTRACTOR.
- UNDERGROUND UTILITIES SHOWN ON THESE PLANS ARE SCHEMATIC ONLY AND MAY NOT BE COMPLETE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING "MISS UTILITY" PRIOR TO CONSTRUCTION SO THAT ALL UTILITIES MAY BE LOCATED IN THE FIELD. IF THE CONTRACTOR PERCEIVES THAT A CONFLICT BETWEEN THE UTILITIES AND THE TRAFFIC SIGNAL WILL OCCUR, THE CONTRACTOR SHALL NOTIFY THE PROJECT ENGINEER IMMEDIATELY SO THAT THE CONFLICT MAY BE RESOLVED.
- ALL TRAFFIC SIGNAL FOUNDATIONS SHALL BE INSTALLED AT THE FINAL SIDEWALK OR CURB GRADE FOR CLOSED SECTIONS. HIGHEST ROADWAY PROFILE GRADE FOR OPEN SECTIONS, TO MEET CLEARANCES AS SPECIFIED IN MD 816.03, MD 818.01, MD 818.02, MD 818.04. THE CONTRACTOR SHALL VERIFY ULTIMATE GRADES PRIOR TO THE INSTALLATION OF ALL SIGNAL EQUIPMENT.
- ACCESSIBLE PEDESTRIAN CONTROL EQUIPMENT SHALL BE DELIVERED TO THE SHA SIGNAL SHOP FOR TESTING AND PROGRAMMING PRIOR TO INSTALLATION. CONTACT MR. EDWARD RODENHIZER AT 410-787-7652 TO COORDINATE.
- LOCATION OF ACCESSIBLE PEDESTRIAN PUSHBUTTONS MUST MEET THE LOCATION REQUIREMENTS OF THE MUTCD, SECTION 4E-09 AND FIGURE 4E-2 AND THE NCHRP PUBLICATION, "ACCESSIBLE PEDESTRIAN SIGNAL: GUIDE TO BEST PRACTICE." IF NOT MET, THE CONTRACTOR IS TO STOP WORK ON PUSHBUTTON LOCATIONS UNTIL THE CONFLICT HAS BEEN RESOLVED. IF NEEDED, A DESIGN WAIVER SHALL BE OBTAINED, APPROVED BY THE DIRECTOR, OFFICE OF TRAFFIC AND SAFETY.
- PUSHBUTTONS ARE TO BE LOCATED SO THAT THEY CAN BE ACTIVATED BY A PERSON IN A WHEELCHAIR REACHING LESS THAN 18" FROM A 60" X 60" LEVEL LANDING AREA WITH A CROSS SLOPE OF LESS THAN OR EQUAL TO 2%.
- THE 10' SEPARATION BETWEEN PUSHBUTTONS IS TO BE MEASURED FROM FACE OF PUSHBUTTON, NOT CENTER TO CENTER OF POLE.
- PUSHBUTTON ARROWS AND SIGNS ARE TO BE ORIENTED PARALLEL TO THE CROSSING FOR WHICH THEY ARE INTENDED.

TOD NO:XX449-38
SHA NO:PG556A59/B59
MD 197@SNOWHILL ESTATES LA.

RK&K

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SHA

STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION

OFFICE OF TRAFFIC & SAFETY
TRAFFIC ENGINEERING DESIGN DIVISION

MD 197 (LAUREL BOWIE ROAD) AT
SNOWHILL ESTATES LANE
BOWIE, MARYLAND

REVISIONS

GENERAL INFORMATION SHEET

SCALE NONE DATE JUNE 2009 CONTRACT NO. XX4495185

DESIGNED BY SK COUNTY PRINCE GEORGE'S

DRAWN BY SK LOGMILE 16019713.210

CHECKED BY DAE TMS NO. 1482

FAP NO. TOD NO.

TS NO. 3078D-G1 DRAWING SG-02 OF 03 SHEET NO. 2 OF 3

PLOTTED: Friday, June 26, 2009 AT 11:02 AM
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